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ABSTRACT

A total of 3,590 students, 155 instructors, and the directors from nineteen of the fifty-nine Minnesota secondary vocational centers participated in a study to collect information about the centers. Focus of the student information was on characteristics by age, sex, parental occupations, etc.; the extent to which students are bused, the time spent in transit, and attitudes about bussing; influences and student perceived reasons for enrollment; and significant differences between males and females, juniors and seniors, students from different geographic regions, and bus riders vs. non-bus riders. Instructor information sought to describe the staffs in terms of basic biographical data, occupational work experience, education, professional trade/business and/or community organization membership, and opinions/attitudes on a variety of center related issues. Significant staff differences were identified by sex and geographic area. Findings showed that 70% of the students ride a bus to the center and that their attitude toward the ride is the most negative aspect of their center experience. In general, student attitudes toward their vocational experience are very positive and they recognize its impact on post-high school plans and life work goals. Student reasons for enrollment parallel statewide vocational center objectives. The typical instructor is under 35 with a bachelor's degree, tends to be more active in community than in professional organizations, uses competency based curriculum, and prioritizes instructional goals as follows: occupational exploration, preparation for advanced training, and job placement. (Questionnaires and data analyses are included.) (VB)

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ATTRIBUTES OF SECONDARY VOCATIONAL CENTER TRAINING: NATURE OF PROGRAMS AND STUDENT PERCEPTIONS AND PLANS

BY

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STAPLES, MINNESOTA

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APPENDIX B
Results of Instructor Questionnaire 1-15

BACKGROUND

The post-high school area vocational technical institute system has been in existance in Minnesota since the late 1940's. Currently, there are 34 such schools spread over the entire State. Programs in these institutes are usually two years or less in duration and can be generally described as terminal; providing training for specific entry level occupational proficiency.

The secondary vocational centers are a much more recent phenomenon. Legislation was passed in 1967 enabling independent school districts to band together for the purposes of providing vocational education. The first such center started operation in the 1971-1972 school year. As of July 1, 1977, there were 59 such centers in the State with more being planned.

SUMMARY

The main objective of this study was to ascertain some of the more important attributes of the secondary vocational center system as it currently exists in the State of Minnesota. To achieve this objective, the center system was looked at from these perspectives; the student, the instructor and the center director. Data from the student and instructor questionnaires is included in this report.

A total of 3590 students from 19 of the 59 secondary vocational centers of the State participated in the study. The predominant center student respondent was a male 17 years old, and a senior.

Of the students surveyed, over 70% ride a bus to the center. The student's attitude toward this bus ride is the most negative aspect of their center experience. About 50% of the bus riders have a negative attitude toward the bus ride. Interestingly, the most negative students are from the metro area. Also, riding or not riding a bus makes no difference in terms of participation in extra-curricular activities and student government.

In general, students are very positive about their vocational center experience. They are very positive in terms of how much they enjoy their courses and how they feel about their instructors.

The center experience results in a substantial positive attitudinal change toward school. A total of 41.5% of the students say their attitude toward school has improved

because of their center experience.

The center experience also has a very real impact upon the student's vocational/educational plans after high school. In nearly 1/3 of the cases, the center experience has resulted in changing both their post-high school educational plans and their life's work goals.

This researcher also thought it very significant that students identified, as their reasons for attending the center, the three stated objectives of the state-wide vocational center system.

There were a number of interesting response differences with regard to sex, geographic area and class in school. These differences are contained in the text of this report.

Of the 155 instructors surveyed, the predominant respondent was a male under 35 years of age with a Bachelor's Degree.

These instructors were not particularly active in professional teacher organizations (such as MEA, MVA, MFT etc.) with less than 50% belonging to any one organization. On the other hand, nearly two thirds were active in local civic/community organizations.

These instructors operated with competency based curriculum for the most part and had strong positive feelings for the necessitity of articulation with post-high school counterparts. Also, advisory committees were an important part of their programs.

Instructors prioritize their instructional goals as follows:

1. occupational exploration;

2. preparation for advanced training;

3. job placement.

Instructors viewed their most significant problems with students as motivation and, secondarily, attendance.

Response differences of instructors with respect to sex and geographic area of the State were also analyzed. Females were better educated and felt much more strongly about occupational exploration as a primary instruction goal. Metro instructors were the most orientated toward job preparation as a primary center goal. Other response differences are included in the text of the report.

On the basis of the results of this study, this researcher cannot help but concluded that the secondary vocational center has a very pervasive and positive influence on the students that attend. Stated simply, students like their courses and their instructors. Furthermore, their center experience is making a real impact upon their future educational and vocational plans.

METHODOLOGY

The State of Minnesota was divided into three geographic regions for the purpose of this study. The first area, designated "northern Minnesota" consisted of Economic Development Regions 1,2,3,4,5 and 7. The southern Minnesota region consisted of Economic Development Regions 6,8,9 and 10. The metro area was defined as Economic Development Region 11.

These areas contain the following percentages of the total population of the State:

Northern Minnesota	27.2%
Southern Minnesota	24.0%
Metro Area	49.3%

(Source: Minnesota Pocket Data Book, 1975, p. 152)

At the time of the study, there were 59 Secondary Cooperative Vocational Centers. Four of these centers were what might be called "single district" centers. In these cases, the center is a part of a single independent school district. Three centers are a part of an intermediate school district established by the Legislature. The other 52 centers are called "cooperative" centers where a number of independent school districts band together to cooperatively offer vocational educational services.

For the purposes of this study, it was decided to try to sample approximately 20% of the total secondary vocational center student and instructional population. For the purposes of obtaining the most representative random sample possible,

a stratified sampling procedure was used. In the northern and southern areas, the approximate average size of the vocational centers was determined. A random sample of four below average sized schools and four above average sized vocational centers for each region was then drawn. In the metro area, it was decided to draw a sample of two of the single district centers and two of the intermediate districts. For purposes of the study, the two Suburban Hennepin Campuses were treated as separate schools.

This sampling resulted in a total of 20 of the 59 centers of the State being chosen for analysis. In actuality, data was obtained from 19 schools; one single district metro school declined to cooperate.

The study was explained to a state-wide meeting of Secondary Vocational Administrators in the Spring of 1977. Calls solicitating cooperation were made to all the sample schools during the first week of April, 1977. Appointments to visit these vocational centers were set up between April 18th and May 6th, 1977. All participating centers were visited during this period of time.

Vocational center directors were asked to administer the questionnaires to students and instructors on a single day prior to the end of the school year. Most centers administered the surveys within two weeks.

The survey instruments were collected, coded, keypunched and the results computor analyzed during the Summer and Fall of 1977.

It was decided that for the purpose of comparing differ-

ences in responses on the part of both students and instructors, a chi-square statistical analysis would be used. The level of significance selected was .05. In other words, the probability that a specific chi-square value could occur by random sampling alone (chance) must have been less than 5 times in a hundred in order for differences in responses to be considered significant.

With respect to all response comparisons, the null hypothesis of no response difference was postulated in all cases. Statistically significant response differences (a rejection of the null hypothesis) are included in this report.

OBJECTIVES

The general purpose of this study was to describe some of the attributes of the secondary vocational center system as it currently exists in Minnesota. In addition, the study sought to ascertain some of the plans and perceptions of high school students who were participants in center programs.

To accomplish this purpose, 3 different instruments were designed. The first of these was for students and afforded students the opportunity to express attitudes about their vocational center experience as well as give expression to their future vocational plans. The second instrument was designed for the instructional staff. It was designed to collect biographical data as well as determining attitudes and opinions of the instructional staff with respect to a number of vocational center issues and concerns. The last instrument was an open ended structured interview to be used with center directors.

This report will concentrate on the results of the student and instructor questionnaires. Data from the structured interviews with the secondary vocational directors is still in the process of analysis and is not included in this report.

The specific objectives of the student portion of the study are as follows:

a. Describe the characteristics of vocational center students in terms of:

   1. basic biographical data (age, sex, parental occupations);

2. basic school data (center enolled in, home high school, high school class and program).

b. Determine the extent to which students are bussed, time spent in transit and attitudes about bussing.

c. Determine influences and student perceived reasons for enrollment in a vocational center program.

d. Determine student attitudes on the effect of vocational center experience on general attitude toward school.

e. Determine how center students compare home high school and vocational center in terms of courses and teachers.

f. Determine vocational/educational plans upon graduation from high school.

g. Determine student perceptions of effect of secondary vocational centers experience on educational/vocational plans.

h. Determine student perceptions on who could be most helpful in choosing occupations.

i. Determine effect of vocational center experience on participation in and attitudes toward participation in sports, extra-curricular activities and student government.

j. Determine extent of student participation in student government and vocational student organizations at the vocational centers.

k. Determine any significant differences between the following groups of students:

1. male and female;

2. sophomores, juniors and seniors;

3. students from different geographic regions;

4. bus riders vs. non-bus riders;

on selected response variables.

The specific objectives of the instructor portion of the study are as follows:

a. Describe the characteristics of the instructional staff in terms of:

1. basic biographical data (age, sex, vocational service area, certification);

2. experience in education;

3. occupational work experience;

4. education;

5. professional, trade/business and/or community organization membership;

6. opinions/attitudes on a variety of vocational center related issues.

b. Determine any significant differences between instructional staff of different sex and from different geographic areas with respect to selected response variables.

STUDENT RESPONSES

Student responses to the survey are first put forth in straightforward frequency distributions. These results are contained in pages 1 through 14 of Appendix A. A total of 3590 students were surveyed of which 2010 (56%) were male and 1562 (43.5%) were female. Eighteen responding students did not indicate their sex.

The median age of the students was seventeen and they were predominantly high school seniors (54.8%).

Their mothers were predominantly housewives (48.8%) and the dominant occupation of their fathers was farmer or farm manager (23.5%) followed closely by craftsman and kindred workers (19.1%).

The students represented 19 different secondary vocational centers and came from a total of 97 different high schools. This data is contained in detail on pages 11 through 14 of Appendix A.

The students were asked a total of 31 questions which focused on general descriptive data, their perception and attitudes with respect to their vocational center experience and their post-high school plans. This narrative will not attempt to summarize their responses in their entirety but will focus on what this researcher feels to be the most salient aspects of these responses. Frequency distribution of their responses may be found on pages 1 through 8 of Appendix A.

Approximately equal numbers of students attend the vocational

center in the same town as their high school compared to the number attending a center in another town (question #1). A large majority are bus riders (72.9%)(question #2) but the bus rides are predominatly short. Thirty seven and nine tenths percent (37.9%) of the bus riders ride 5 miles or less (question #3).

Possibly the most negative attitudinal response of the students is with respect to how they feel about the bus rider (question #5). Of the 2650 bus riders, 18% dislike it very much and an additional 31.7% have a negative attitude toward the bus ride. A little over 18% are neutral and nearly 27% "like it somewhat".

As will be seen later in more detail, the responses of different groups reveal some interesting differecnes. Males who ride the bus are much more negative about the experience than females. Of the 2637 valid responses to this question, 59% of the males dislike the bus ride very much as compared to 41% of the females. Furthermore, attitudes toward the bus ride are substantially more negative in the Metro areas.

This researcher found surprising the responses to the question as to who was the greatest influence with respect to the student deciding to come to the vocational center (question #6). Student respondents said that parents and school people had a minor influence. A surprising 65.8% (2361) said it was their own decision. Another 18.6% said their friends were the greatest influence.

Students were also asked for their reasons for enrolling

in a vocational center program. It is interesting to note that their three primary reasons correspond to the stated objectives of the secondary vocational center system. The largest percentage (27.4%) are there to prepare for further education and/or training. A total of 22.3% want to prepare for a job and 18.5% want to explore different occupations.

An extremely significant response seems to be that 41.5% of the students responding said that the vocational center experience improved their attitude toward school (question #10). This would seem to tie in closely with the response that 84.7% of the students enjoy their vocational center courses more than their other high school courses (question #11), and that 44.4% feel that the vocational center teachers do a better job in teaching (question #12).

A number of questions were asked that sought to elicit attitudinal responses with respect to the effect of the vocational center experience on life work and vocational/educational plans after high school. In terms of vocational/educational plans after high school, 37.4% plan on attending a vocational technical institute (question #13). The second highest response to this question was "undecided" (19.5%) followed closely by "get a job" (19.4%). Students wishing to go on to either a two year or four year college experience total 14.4%.

Furthermore, 29.2% of the students said they had changed their minds about their vocational/educational plans after high school as a result of their vocational center experience (question #14). An even larger percentage (32.2%) said they

had changed their mind about what they wanted to do for their life's work as a result of their vocational center experience (question #16). On a more neutral question as to whether their vocational center experience had helped them to make up their minds about their life's work, 55.9% answered positively (question #15).

Two questions were asked relative to the student's attitudes as to the sufficiency of the center experience for occupational preparation. Slightly over 59% of the students responding said that they felt that their center experience would be sufficient to prepare them for a job in their chosen occupation (question #18). An even larger percentage, 66.8%, said that they felt the vocational program they were enrolled in would help prepare them for the specific occupation they would want to follow for their life's work (question #30).

Another very important aspect of the study was to try and determine student attitudes relative to the effect of the center experience on student participation in sports, extra-curricular activities and student government. A total of nine questions were asked in this area of concern (questions #19 through #27).

The overwhelming response on the part of the students was that their vocational center experience did not interfere with their participation in these high school activities. A total of 91.6% said that they did not find it harder to participate in sports because they attended the center (question #20). With respect to extra-curricular activities, 42.4% of the students said they participated in extra-

curricular activities in their home high school (question #22) and a total of 92.5% said that they did not find it harder to participate in extra-curricular activities (other than sports) because they attended a vocational center (question #23). Lastly, 91.1% of all students surveyed said they did not find it harder to participate in student government in their home high school because they attended a vocational center (question #26).

Students were also asked about their participation in a vocational youth organization. There was some membership in all vocational youth organizations but a surprising 45.5% of the students said that they did not participate in any of these organizations.

The final question put to students was whether or not and to what extent they worked part time on a job for which they were paid. Nearly 38% of the students held no paid part-time job, but, on the other hand, a surprising 13.3% said they worked over 30 hours per week. An additional 17.9% work between 20 and 29 hours per week and 19.5% worked 10 to 19 hours per week.

RESPONSE DIFFERENCES BETWEEN BUS RIDERS AND NON-BUS RIDERS

A continual concern during the development of the secondary vocational center concept in our State has been the effect of the bus ride on the "total education" of the student. Of particular concern has been the supposed detrimental effect of the vocational center bus ride on extra-curricular activities.

In response to this concern, this study sought to determine if the students surveyed felt that their participation in a vocational center affected their participation in sports, extra-curricular activities (other than sports) and/or student government in their home high school. In this respect, the responses to 9 questions related to this concern were analyzed. The respondents were divided into bus riders (2605) and non-bus riders (943) and their responses compared statistically.

There were no statistically significant differences between bus riders and non-bus riders on any of the comparisons.

The first concern explored was participation in sports. Of the students bussed to the center, 28.2% participated in sports. In the case of the bus riders, only 4.9% said that they found it more difficult participating in sports. A slightly greater percentage (5.1%) of the non-bus riders found it more difficult to participate in sports. As already mentioned, their differences were not statistically signi-

ficant.

Almost identical percentages of bus riders (42.9%) and non-bus riders (42.4%) participated in extra-curricular activities other than sports. Again, only small percentages, 5.1% in the case of bus riders and 5.0% in the case of non-bus riders, found it more difficult to participate in extra-curricular activities because of their vocational center experience.

The last concern to be explored was participation in student government. Of the bus riders, 9.9% participated in student government as compared to a 7.9% participation on the part of non-bus riders. Only 4.3% of the bus riders and 3.1% of the non-bus riders found it more difficult to participate in student government.

It would seem that one can safely conclude that riding or not riding a bus is not a factor in either participation rate or the student perceived difficulty in participation in sports, other extra-curricular activities and student government in home high schools.

RESPONSE DIFFERENCES BETWEEN MALE AND FEMALE STUDENTS

Another objective of the study was to determine if there were any statistically significant differences between the response of male and female students with respect to some of the questions asked. In other words, this analysis sought to determine whether the responses to these questions were independent of the sex of the student respondent.

The responses to fifteen questions were analyzed in this respect:

A. Attitude toward bus ride;

B. Greatest influence to attend center;

C. Reasons for enrolling;

D. Attendance at a vocational center last year;

E. Attitude toward school as a result of vocational center experience;

F. Enjoyment of center courses vs. other high school courses;

G. Attitude with respect to which teachers (vocational or regular high school) do a better job;

H. Educational plans after high school;

I. Effect of vocational center experience on vocational and/or educational plans;

J. Whether or not vocational center experiences were helpful in making up student's mind about life's work;

K. Whether or not vocational center experience changed the student's mind about life work plans;

L. Who could be of most help in choosing life's work;

M. Attitude toward sufficiency of center experience to prepare for life's work;

N. Helpfulness of center experience in preparing for chosen occupation;

O. Having a part-time job.

There were no statistically significant differences in the male - female responses on 4 of the 15 questions. These questions involved A) attitude toward bus ride; E) attitude toward school as a result of the vocational center experience; M) attitude toward sufficiency of center experience to prepare for life's work; and N) helpfulness of center experience in preparing for chosen occupation.

The other eleven questions showed significantly different responses with respect to the sex of the respondent. There are a number of very interesting response differences in this group. In the following paragraphs, an attempt will be made to point out the most salient of these differences.

First of all, there are significant differences in the responses of males and females in terms of who they see as the greatest influence to attend the vocational center. The greatest difference is that females are more influenced by friends (22% vs. 16.9%) and that a greater percentage of the males indicate they made their own decision (69.7% vs. 64.1%). Additionally, counselors are slightly more influential in the case of the females.

With respect to reasons for enrolling in a vocational center program, the percentage of male responses exceeds the female with respect to preparing for a job (26.3% vs. 18.2%) and exploring differenct occupations (20.5% vs. 17.0%). The percentage of responses of females most greatly exceed males in terms of preparation for further education (32.7% vs. 24.5%) and in terms of trying something new (17.8% vs.

13.2%).

The percentage of female responses exceeding the percentage of male responses with respect to the purpose of preparation for further education will be shown more dramatically a bit further on when student responses to the question of educational plans after high school are explored.

Question #8 on the questionnaire explored the attendance of respondents at the vocational center during the previous year. More males (23.4%) attended the previous year than females (13.4%).

Students were also asked to compare their vocational center courses and their other high school courses. Of the 1992 males responding, an overwhelming 90.5% said they enjoyed their vocational center courses more. This compared to a 79% positive response on the part of the females.

Another question concerning students comparisons of vocational center experiences with regular high school involved the students perception as to which teachers did the better job. Again the males were more positive than the females (49.2% vs. 38.7%) and, conversely, the females were slightly more positive (10.3% vs. 7.0%) with respect to regular high school teachers doing a better job.

There were also some interesting differences between the responses of males and females in terms of educational/vocational plans after high school. Whereas 40.6% of the males plan to go on to a vocational technical institute, only 35.1% of the females plan to do so. Nearly twice the percentage of females (7.5% vs. 3.8%) plan on attending a

community of junior college. Again, over twice the percentage of females (13.3% vs. 6.2%) plan on attending a four year college.

A surprising statistic, at least to this researcher, is the fact that only 10% of the 1963 males questioned plan on any type of college education; 2 year or 4 year.

More males (21.6%) than females (17.6%) plan on getting a job after graduation. As one might expect, more males than females (7.0% vs. 1.6%) plan on entering some sort of military service.

Three closely related questions were asked relative to the effect of the vocational center experience on what the student wanted to do for his/her life's work. The first question asked if the vocational center experience resulted in a change of mind with respect to intended life's work. In the case of females, 33.3% responded positively as compared with 26.4% of the males. A second question asked if the vocational center experience was helpful to the student is making up his/her mind about a life work. Again, the females were more positive (60.5% vs. 53.2%). Lastly, students were asked if the vocational center experience had resulted in a change of mind about life's work. A substantial 38.5% of the females responded positively compared to 27% of the males.

A reasonable deduction on the basis of this evidence is that the vocational center experience is more influential in the case of the females with respect to life's work.

A question closely related to the previous three concerns

student responses as to who could be most helpful in choosing life's work. Parents were substantially more influential in the case of the males (28.1%) than in the case of the females (19.8%). High school counselors (13.1% vs. 10.3%) and vocational teachers (14.8% vs. 11.7%) are more influential in the case of the females.

A last significant difference with respect to the responses of male and female students involve paid part-time work. A greater percentage of females worked not at all (42.8% vs. 34.2%), 0 to 9 hours per week (12.1% vs. 9.2%), and 10 to 19 hours per week (23.2% vs. 17.2%). In terms of longer hours, the male percentage was larger than the female: 19.2% vs. 16.6% in the 20 to 29 hour per week category, and 20.2% vs. 5.2% with respect to 30 or more hours per week.

RESPONSE DIFFERENCES BETWEEN SOPHOMORES-JUNIORS AND SENIORS

This study also sought to determine response differences between sophomores-juniors and seniors with respect to educational/vocational plans after high school. Because the study sample included only 38 sophomores, they were included with the juniors. The two groups, therefore, consisted of 1597 sophomores-juniors and 1968 seniors.

The two groups were compared on the following parameters:

A. Educational plans after high school;

B. Effect of center experience on vocational/educational plans;

C. Helpfulness of vocational center experience in making up mind about life's work;

D. Did vocational center experience change mind about life's work;

E. Who could be most helpful in choosing life's work;

F. Sufficiency of vocational center training to prepare for chosen occupation;

G. Helpfulness of vocational center training in preparing for an occupation.

There were statistically significant differences between the two groups on only the first two of these parameters. On the other parameter, there were no statistically significant differences between the responses of the two groups.

With respect to educational plans after high school, more seniors (40.5%) than sophomores-juniors (35.5%) plan on attending a vocational technical institute. In terms of either two year or four year college or university,

the percentage of seniors expressing their plans is only slightly larger than the sophomore-junior group. More seniors (22%) plan on going to work than sophomore-juniors (17%) and, as one might expect, substantially more sophomore-juniors are undecided (26.8%) than are the seniors (14.2%).

Also, significant were the differences in the responses of the two groups with the effect of the center experience on vocational/educational plans. Of the sophomore-junior group, 31.9% said the center experience changed their mind. 27.3% of the seniors made this same response.

RESPONSE DIFFERENCES BETWEEN STUDENTS FROM DIFFERENT GEOGRAPHIC AREAS OF THE STATE

The study also sought to determine whether there were statistically significant differences between responses of students from different geographic areas of the State. For this purpose, the State was divided into a northern region, southern region and the greater metropolitan Twin City area. As mentioned earlier, under methodology, the northern area consisted of Economic Development Regions 1,2,3,4,5 and 7. The southern region consisted of Economic Development Regions 6,8,9 and 10. The metro area consisted of Economic Development Region 11.

Responses of the students from these three geographic regions were compared on 14 different parameters:

A. Attitude toward bus ride;

B. Greatest influence to attend center;

C. Reasons for enrolling;

D. Attendance at vocational center last year;

E. Attitude toward school as a result of vocational center experience;

F. Enjoyment of center courses vs. other high school courses;

G. Attitude with respect to which teachers (vocational center or regular high school) do a better job;

H. Educational plans after high school;

I. Effect of vocational center experience on vocational and/or educational plans;

J. Whether or not vocational center expereinces were helpful in making up student's mind about life's work;

K. Whether or not vocational center experience changed the student's mind about life's work plans;

L. Who could be of most help in choosing life's work;

M. Attitude toward sufficiency of center experience to prepare for life's work;

N. Having a part-time job.

There were statistically significant differences between the student responses from the different areas on all 14 of these parameters. Generally, and possibly as one might expect, the greatest differences seem to occur between the responses of the metro students and the outstate students. There is much less difference between the responses of students from the northern and southern parts of the State.

In terms of attitude toward the bus ride on the part of those students who ride the bus, the area with the largest percentage of students who "disliked it very much" was from the metro area. A total of 24.2% of the metro area students dislike the bus ride "very much". This compares with 21.9% of northern Minnesota students and 13.1% of the southern Minnesota students. Also in the "dislike it somewhat" category, the metro percentage is highest with 36%. Northern Minnesota comes next with 32.1% and southern Minnesota comes in last with 29.4%.

It is interesting to note, therefore, that 61.1% of the metro students express negative feelings about the bus ride compared to 54% of northern Minnesota students and 42.4% of southern Minnesota students.

A greater percentage of metro students (70.1%) said that attendance at the center was their own decision as compared

to 67.7% of the northern Minnesota students and 65.7% of the southern Minnesota students. Also, metro area parents were more influential in helping students decide to attend the vocational center than in the outstate areas (6.2% metro, 2.9% northern and 3.1% southern). Lastly, friends were less influential in the metro while counselors in this area seemed to have more influence.

Comparisons were also made on the students reasons for enrolling in a center program. Metro area students were more "job" and "preparation for other education" orientated than outstate students. A tabular survey of these results is as follows:

	Northern	Southern	Metro
Prepare for a job	21.4%	19.3%	33.3%
Preparation for further education	24.9%	29.9%	30.3%
Explore different occupations	20.6%	19.1%	15.3%
Try something new	15.5%	16.9%	11.0%
Other reasons	17.6%	14.8%	10.1%

The "other reasons" category includes minor responses to the 3 remaining categories in this question.

In the case of attendance at the center last year, northern Minnesota students registered the highest percentage (27.3%) followed by southern Minnesota students (18%) and metro (15.1%).

An interesting result was that 49.6% of the metro students said that the vocational center experience improved their attitude toward school. This compared to 40.5% of the northern Minnesota students and 39% of the southern. Additionally, the metro students were more positive than the two groups

of outstate students on the questions as to whether or not they enjoyed their vocational center experience more than the other high school courses they were taking. Of the metro students, 89.6% said they enjoyed them more as compared to 85% of the northern students and 84.2% of the southern.

A number of questions relative to the vocational/educational plans of students were also analyzed by geographic area. The table below summarized educational/vocational plans after high school:

	Northern	Southern	Metro
Voc-Tech Institute	34.0%	40.2%	42.1%
Community or Junior College	4.7%	5.5%	6.7%
Four year College	9.4%	9.2%	9.3%
Private trade/Business College	2.7%	2.8%	2.8%
Get a job	22.7%	19.4%	15.1%
Military service	3.9%	5.6%	3.9%
Undecided	27.6%	17.3%	20.1%

Also significant were the differences between the responses of students from different geographic areas with respect to whether or not their vocational center experience changed their mind about their vocational/educational plans. Of the metro students, 40.2% said their center experience changed their minds. This compares to 26.8% for both the northern and southern Minnesota students.

A similar question asked students if the vocational center experience helped them to make up their minds about their life's work. Affirmative responses of metro students (66.1%) again exceeded northern (52.1%) and southern Minnesota

students (55.8%).

Slightly over 42% of metro students said that they changed their mind about their life's work because of their vocational center experience. This compared to a 28.3% positive response from northern Minnesota students and a 31.8% positive response from students in the south.

In answer to the question as to whom students felt could help them most about deciding about their life's work, outstate parents were more influential than metro parents. Nearly 27% of the outstate students listed parents compared to 15.8% of the metro students. Counselors were slightly more influential in outstate areas (10.8% northern, 13.4% southern and 9.0% metro).

Students were also asked two closely related questions as to the "sufficiency" and "helpfulness" of their vocational center training with respect to preparation for a job in their chosen occupation. Again, the metro students were significantly more positive. Seventy percent (70%) of the metro students thought their training "sufficient" to prepare for a job. This compared to 57.5% on the part of both northern and southern Minnesota students.

Likewise, 76.6% of the metro students found their center training helpful in preparing for a job in their chosen occupation as compared to 66% of both northern and southern Minnesota students.

It should be noted that the more positive response on the part of metro students to the two above questions is consistant with their stated reasons for enrolling in a

center program. Their predominant reason for enrolling was to prepare for a job (33.3% metro, compared to 21.4% northern Minnesota and 19.3% southern Minnesota).

Lastly, student responses were analyzed by area with respect to part-time work. The most obvious difference in this response category was that significantly more metro students worked (69.8% metro, 61.7% southern and 58.5% northern).

INSTRUCTOR RESPONSES

Frequency distributions of the responses to the instructor survey are found in Appendix B. This narrative will attempt to point out the highlights of the survey. The reader should refer to Appendix B for a complete tabulation of survey results.

A total of 155 instructors were surveyed of which 102 (65.8%) were male and 51 (32.9%) were female. Two instructors did not respond to this question.

The instructional staff of the vocational center is predominantly young; over half (52.9%) are under 35 years of age.

In terms of vocational service area certification, the majority of instructors are Trade and Industrial (68 or 43.9%). Health and Home Economics were each represented by 22 instructors (14.2%) followed by Business and Office with 12 (7.7%). Only 9 instructors were certified in Agriculture. A majority of the instructors surveyed hold a 5 year secondary vocational certificate (43.2%). Interestingly, 40 instructors (25.0%) chose not to answer this question.

The median number of years the responding instructors have held their present position is between 3 and 4. Only 26 (16.8%) have held their position for more than 6 years. To some degree, this reflects the "youthfulness" of the center concept in many areas of the State.

Instructors were asked to indicate any secondary school teaching prior to being employed by the center. Seventy-

eight (50.3%) had no previous secondary teaching experience. Ten instructors (6.5%) indicated less than 1 year previous secondary experience, 34 (21.9%) indicated 1 to 3 years and a group of 15 (9.7%) indicated more than 10 years.

A number of instructors, 44 in all, indicated post-secondary teaching experience prior to being employed by the center.

With respect to occupational experience, 105 (67.7%) indicated they earned the majority of their occupational experience at a full time job. Those who indicated a majority of part time job experience totaled 28 (18.1%) with an additional 11 (7.1%) indicating summers only.

Instructors were also asked to indicate their total years (or equivalent thereof) of full time occupational experience applicable toward current certification. The largest group, 41 (26.5%), indicated 3 to 4 years of occupational experience. Another 30 (19.4%) indicated between 5 and 6 years and 13 (8.4%) indicated more than 10. The median occupational experience applicable toward current certification would seem to be about 5 years.

Another area of concern with respect to the survey centered on professional teacher education. Asked about highest degree earned, a majority (58.1%) have earned a Bachelor's Degree. A large majority of the respondents (80.6%) indicated that they received the majority of their professional teacher education course work at a state college or university.

A substantial 23.2% (36 instructors) were currently working on a Master's Degree although a majority (53.5%)

were not currently working on a degree of any kind.

Of the 155 instructors surveyed, 99 (63.9%) sponsored a co-curricular student organization. Conversely, 53 (34.2%) said they did not sponsor a vocational student organization. VICA was the predominant vocational youth organization followed by OEA, DECA and HEART.

With respect to instructor membership in professional organizations, less than half (73) belonged to MVA. Nearly half (75) were members of MEA and 26 were MFT members. Only 55 instructors were members of the American Vocational Association.

In terms of other professional organizations, (other than professional teacher organizations) 58.3% of the instructors held 1 or more memberships. Additionally, 25.8% of the instructors held membership in trade and/or business organizations.

The instructors were quite active in civic/community organizations with 64.5% reporting 1 or more memberships.

With respect to their programs, 91% of the instructors reported that specific, measurable goals and objectives had been established. An even larger percentage, 93.5%, felt that specific goals and objectives were necessary to do an adequate job in teaching.

Instructors were asked to indicate which of two general descriptions most closely described their curriculums. The first description was of a more traditional "lock-step" curriculum where the course was divided into a number of specific units and students were expected to progress as a group from one unit to another. The other description was of

a competency based curriculum where the course content is divided into certain specified competencies and students are generally allowed to progress at their own rate. A more traditional curriculum was reported by 86 (55.5%) of the instructors compared to 65 instructors (41.9%) reporting more competency based curriculums.

A substantial portion of the instructor questionnaire was devoted to opinions about various subjects. The first question asked instructors for their opinion of the adequacy of the job done by guidance counselors in member schools in counseling students about vocational technical educational opportunities. A total of 31 (20%) said the counselors were doing an adequate job. Conversely, 120 (77.4%) felt counselors were not doing an adequate job in this respect.

On the other hand, instructors had a strong feeling for their own responsibility in counseling students about further vocational technical educational opportunities. All but one of the instructors surveyed (154 out of 155) expressed a responsibility in this area.

In terms of helping students find a job upon graduation, a majority of the instructors (54.8%) said they felt it was not a part of their responsibility.

All but 7 instructors reported having advisory committees. These committees seem quite active with 76.2% meeting 2 or more times per year. Only 7.1% of the instructors find these committees "not too helpful". On the positive side, 66 instructors (48.6%) find them "somewhat helpful" and a like number (66) find them "very helpful".

Instructors were also asked about the adequacy of their facilities, equipment and supplies. Adequate was defined as sufficient to meet the objectives of the program. Instructors were predominantly satisfied with what they had to work with in all these areas. In terms of facilities, 85.2% found their facilities "adequate" or "more than adequate". With respect to equipment, 65.8% found it adequate and another 27.7% found their equipment "more than adequate". An even more positive response was forthcoming with respect to supplies; 67.1% found them "adequate" and another 27.7% found them "more than adequate".

Two questions asked the instructors to prioritize the three stated state-wide goals of secondary vocational center education in relation to their own program. With respect to what they identified as the primary goal of their program, the responses were as follows:

Occupational exploration	60.0%
Preparation for advanced training	25.2%
Placement in a job	7.7%

With respect to what they felt were of second greatest importance, the instructors responded as follows:

Preparation for advanced training	54.0%
Placement in a job	20.0%
Occupational exploration	19.4%

It is clear, therefore, that occupational-exploration is clearly the primary goal of a substantial majority of the instructors. In terms of a secondary goal, there is a substantial majority stressing preparation for advanced training.

Instructors also feel strongly about articulation of secondary vocational center programs with post-high school programs. A total of 85.8% of the instructors feel that curriculums should be articulated. A substantial majority (79.4%) also feel that it is part of their responsibility to work toward articulation. A bare majority (54.8%), however, have made any effort to articulate their curriculum with post-high school counterparts. In terms of responsibility for articulation, 51% feel the prime initiation responsibility should be with the State Department.

Motivation was listed as the most significant problem the instructors faced in working with students. Fifty one instructors (32.9%) gave this indication. Following, in order, was attendance (19.4%) and student's ability (17.4%). Interestingly, only 7.7% of the instructors listed discipline as the most significant problem.

Motivation was also listed as the second most significant problem faced by instructors as they worked with students (29.7%). Attendance was again listed in second place (16%) followed by discipline (14.2%).

A historic complaint of vocational educators is that their programs become "dumping grounds" for low achievers and problem students. Of the 155 respondents to this survey, 42 (27.1%) felt this to be true compared with the 103 (66.5%) who did not feel it to be true.

RESPONSE DIFFERENCES OF INSTRUCTORS WITH RESPECT TO SEX

One of the objectives of the study from the point of view of the instructor's survey was to compare the responses on a number of parameters with respect to sex. These responses were analyzed statistically to determine if the response differences observed in the sample of 155 instructors were significant. Statistically significant differences in this case allow one to generalize with substantial confidence the entire instructor population in all vocational centers.

Responses by sex were analyzed with respect to 19 parameters. These are listed below:

A. Teaching experience;

B. Highest degree earned;

C. Professional teacher education;

D. Currently working on a degree;

E. Professional teacher organization membership (MVA, MEA, MFT etc.);

F. Other professional organization membership;

G. Trade and/or business organization membership;

H. Civic/community organization membership;

I. Curricular description;

J. Attitude toward adequacy of the work of guidance counselors;

K. Responsibility in helping students find jobs;

L. Effectiveness of advisory committees;

M. Primary goal of instructional program;

N. Secondary goal of instructional program;

O. Responsibility to work toward articulation;

P. Individual effort to articulate program with post-high counterparts;

Q. Most significant instructional problem (with respect to working with students);

R. Second most significant instructional problem (with respect to working with students);

S. Does instructor feel program is a dumping ground.

Significant response differences between males and females were noted on five of these parameters.

The first significant difference was with respect to highest degree earned. Only 9.8% of the females had an Associate Degree or less. Twenty eight percent of the males fell into this category. Additionally, a greater percentage of females (66.7% females vs. 55.6% males) had Bachelor's Degrees. With respect to Master's Degrees, however, the percentage of men exceeded women (12.1% vs. 5.9%).

Another difference in the responses of male and female instructors was noted with respect to membership in Trade and/or Business organizations. The males were more active than females (31.0% vs. 13.7%). Substantial numbers of males (67.0%) and females (86.3%) hold no membership in trade and/or business organizations.

Instructors were asked if they felt home high school guidance counselors were doing an adequate job in counseling students about vocational technical educational opportunities. There were significantly different responses with respect to sex in the answers to this question. Of the male instructors, 26.5% were positive about the counselor role. Of the female responses, only 9.8% were positive. This means that large

percentages of both groups expressed a lack of confidence in the home high school counselor with respect to counseling students about vocational technical educational opportunities with the females far more negative than the males.

There were also response differences between male and female responses with respect to what they felt as primary and secondary program goals. Here instructors were asked to prioritize the stated state-wide vocational center goals with respect to their own program.

With respect to what they saw as the primary goal of their program, the response was as follows:

	Male	Female
Occupational exploration	58.3%	78.7%
Preparation for advanced education/training	33.3%	14.9%
Placement in a job	8.3%	6.4%

Here we see that a significantly greater percentage (in excess of 20%) of the females feel that occupational exploration was their primary goal.

With respect to what instructors saw as their goal of second importance, the response was as follows:

	Male	Female
Occupational exploration	25.0%	10.4%
Preparation for advanced education/training	51.0%	72.9%
Placement for a job	24.0%	16.7%

Here again, the percentage of females favoring the "preparation for advanced education/training" goal exceeds males by over 20%.

As previously mentioned, there were no other statistically significant response differences with respect to sex on any of the other parameters.

RESPONSE DIFFERENCES BETWEEN INSTRUCTORS FROM DIFFERENT GEOGRAPHIC AREAS

As previously mentioned, the State of Minnesota was divided into 3 geographic areas for the purposes of this study. The northern area included Economic Development regions 1, 2,3,4,5 and 7. The southern area consisted of Economic Development regions 6,8,9 and 10. The metro area was designated as Economic Development region 11.

Responses of instructors from these three different areas were analyzed with respect to 7 different parameters. These parameters are as follows:

A. Teaching experience (years in present position);

B. Curriculum description;

C. Attitude toward guidance counselors;

D. Helping students find jobs;

E. Primary instructional goals;

F. Secondary instructional goals;

G. Effort to articulate curriculum;

Statistically significant differences were evident on 4 of these 7 parameters.

The first significant difference was with respect to curriculum description. Instructors were asked to indicate which of two descriptions <u>most closely</u> described their present curriculum. The first description was of a more traditional "lock-step" curriculum where the course is divided into a specific number of units and students are expected to progress as a group from one unit to another. A second description

was of a competency based curriculum where the curriculum is divided into certain specified competencies and students are generally allowed to progress at their own pace or rate. The results were as follows:

	Northern	Southern	Metro
Progress as a group (traditional)	57.4%	75.9%	25.7%
Progress at own rate (competency based)	42.6%	24.1%	74.3%

As can be seen, southern Minnesota instructors have substantially more "traditional" curriculums and metro area instructors have a high percentage of competency based programs.

Response differences were also observed with respect to the instructors feeling as to whether or not guidance counselors in member high schools were doing an adequate job in counseling students about vocational technical educational opportunities. The southern Minnesota instructors were most negative (92.7% said no) followed by metro instructors (82.9%) and northern Minnesota instructors (65%).

Another significant difference was in respect to what instructors saw as their primary instructional program goal. Here instructors were asked to prioritize the state-wide vocational center goals in terms of their particular instructional program. The results were as follows:

	Northern	Southern	Metro
Occupational exploration	66.7%	74.5%	47.1%
Preparation for advanced training/education	28.6%	23.4%	29.4%
Placement for a job	4.8%	2.1%	23.5%

The primary response difference here is that job place-

ment is a far more important consideration for the metro instructors. It is also interesting to note the importance placed on occupational exploration by southern Minnesota instructors.

Lastly, there was a response difference with respect to effort to articulate their curriculum with post-secondary counterparts. A large majority (93.8%) of the metro instructors had made articulation efforts compared to 58% of both northern and southern Minnesota instructors.

APPENDIX A

RESULTS OF STUDENT QUESTIONNAIRE

SECONDARY COOPERATIVE CENTER STUDY

PRELIMINARY RESULTS OF STUDENT QUESTIONNAIRE

STANLEY A. EDIN

SEPTEMBER 19, 1977

SECTION I

QUESTION	NO. OF STUDENTS	PERCENT OF TOTAL
1. Where are your attending the vocational center?		
in the same town as my high school	1792	49.9
in another town	1791	49.9
no response	7	.2
TOTAL	3590	100.0
2. Do you ride a bus from your home high school to the vocational center?		
yes	2617	72.9
no	965	26.9
no response	8	.2
TOTAL	3590	100.0
3. If you ride a bus from your high school to the vocational center, how far do you ride?		
0-5 miles	1011	37.9
6-10 miles	441	16.5
11-15 miles	579	21.7
16-20 miles	318	11.9
21-25 miles	234	8.8
26-30 miles	54	2.0
over 30 miles	31	1.2
TOTAL	2668	100.0
4. If you do ride a bus from your home high school to the vocational center, how much time do you spend on the bus going to and from the center each day?		
0-15 minutes	972	36.5
16-30 minutes	753	28.3
31-45 minutes	429	16.1
46-60 minutes	389	14.6
61-75 minutes	84	3.2
76-90 minutes	20	.8
more than 90 minutes	15	.6
TOTAL	2662	100.0

QUESTION	NO. OF STUDENTS	PERCENT OF TOTAL
5. If you do ride a bus from your home high school to the vocational center, do you:		
dislike it very much	477	18.0
dislike it somewhat	841	31.7
can't decide	496	18.7
like it somewhat	707	26.7
like it very much	129	4.9
TOTAL	2650	100.00
6. Who influenced you the most in deciding to come to the vocational center?		
Parents	126	3.5
Friends	668	18.6
Counselor	146	4.1
Principal	16	.4
Shop or Ag Teacher	10	.3
Other Teacher	16	.4
Vocational Center Teacher or Administrator	62	1.7
my own decision	2361	65.8
none of the above	103	2.9
no response	82	2.3
TOTAL	3590	100.0
7. Which of the following reasons most closely matches your reason for enrolling in a vocational center program?		
prepare for a job	799	22.3
prepare for further education and/or training	984	27.4
wanted to get out of traditional courses	320	8.9
wanted to explore different occupations	664	18.5
wanted to try something new	534	14.9
wanted to be with my friends	27	.8
no specific reason	178	5.0
no response	83	2.3
TOTAL	3590	100.0

QUESTION	NO. OF STUDENTS	PERCENT OF TOTAL
8. Did you attend the vocational center last year?		
yes	682	19.0
no	2895	80.6
no response	13	.4
TOTAL	3590	100.0
9. Are you currently enrolled in more than one vocational center program?		
yes	275	7.7
no	3297	91.8
no response	18	.5
TOTAL	3590	100.0
10. Has your vocational center experience changed your attitude toward school?		
improved my attitude toward school	1490	41.5
no change	1954	54.4
worsened my attitude toward school	131	3.6
no response	15	.4
TOTAL	3590	100.0
11. Do you enjoy your courses at the vocational center more than the other high school courses you are taking?		
yes	3041	84.7
no	514	14.3
no response	35	1.0
TOTAL	3590	100.0
12. Which of your teachers do you feel does a better job in teaching?		
Vocational Center Teachers	1595	44.4
Regular High School Teachers	301	8.4
both are about the same	1676	46.7
no response	18	.5
TOTAL	3590	100.0

QUESTION	NO. OF STUDENTS	PERCENT OF TOTAL
13. What are your vocational/educational plans upon graduation from high school?		
Vocational Technical Institute	1343	37.4
Community or Junior College	190	5.3
four-year College or University	327	9.1
private trade or Business School	97	2.7
get a job	698	19.4
military service	163	4.5
undecided	699	19.5
no response	73	2.0
TOTAL	3590	100.0
14. Have you changed your mind about your vocational/educational plans upon high school graduation as a result of your vocational center experience?		
yes	1050	29.2
no	2514	70.0
no response	25	.7
TOTAL	3590	100.0
15. Has your vocational center experience helped you to make up your mind about your life's work?		
yes	2007	55.9
no	1553	43.3
no response	30	.8
TOTAL	3590	100.0
16. Have you changed your mind about what you wanted to do for your life's work as a result of your vocational center experience?		
yes	1155	32.2
no	2404	67.0
no response	31	.9
TOTAL	3590	100.0

QUESTION	NO. OF STUDENTS	PERCENT OF TOTAL
17. Who do you feel could help you the most in deciding what you would like to do for your life's work?		
Parents	862	24.0
High School Teachers	80	2.2
High School Counselor	403	11.2
Vocational Center Teacher	460	12.8
other	1710	47.6
no response	75	2.1
TOTAL	3590	100.0
18. Do you feel that your vocational center training will be sufficient to prepare you for a job in your chosen occupation?		
yes	2126	59.2
no	1418	39.5
no response	46	1.3
TOTAL	3590	100.0
19. Do you presently participate in sports at your home high school?		
yes	1035	28.8
no	2521	70.2
no response	34	.9
TOTAL	3590	100.0
20. Do you find it harder to participate in sports because you attend a vocational center?		
yes	171	4.8
no	3288	91.6
no response	131	3.6
TOTAL	3590	100.0

QUESTION	NO. OF STUDENTS	PERCENT OF TOTAL
21. Since you have been attending the vocational center, which statement would be most true about your participation in sports?		
participate more in sports	112	3.1
no change	3162	88.1
participate less in sports	199	5.5
no response	117	3.3
TOTAL	3590	100.0
22. Do you participate in extra-curricular activities (other than sports) at your home high school?		
yes	1521	42.4
no	2052	57.2
no response	17	.5
TOTAL	3590	100.0
23. Do you find it harder to participate in extra-curricular activities (other than sports) because you attend a vocational center?		
yes	176	4.9
no	3320	92.5
no response	94	2.6
TOTAL	3590	100.0
24. Which of the following statements would be most correct about your participation in extra-curricular activities (other than sports) since you have been attending the vocational center?		
participate in more extra-curricular activities	181	5.0
no change	3179	88.6
participate in less extra-curricular activities	136	3.8
no response	94	2.6
TOTAL	3590	100.0

QUESTION	NO. OF STUDENTS	PERCENT OF TOTAL
25. Are you a member or officer in any form of your student government?		
yes	334	9.3
no	3236	90.1
no response	20	.6
TOTAL	3590	100.0
26. Do you find it harder to participate in student government in your home high school because you attend a vocational center?		
yes	134	3.7
no	3271	91.1
no response	185	5.2
TOTAL	3590	100.0
27. Which of the following statements would be most correct about your participation in student government since you have been attending the vocational center?		
participate more in student government	66	1.8
no change	3201	89.2
participate less in student government	137	3.8
no response	186	5.2
TOTAL	3590	100.0
28. Is there any form of student government (example: student council) at your vocational center?		
yes	1263	35.2
no	2222	61.9
no response	105	2.9
TOTAL	3590	100.0

QUESTION	NO. OF STUDENTS	PERCENT OF TOTAL
29. Do you participate in a vocational youth organization?		
FFA (Future Farmers of America)	432	11.9
VICA (Vocational Industrial Club of America)	489	13.4
FHA (Future Homemakers of America)	263	7.2
DECA (Distributive Educational Clubs of America)	242	6.6
OEA (Office Education Association)	234	6.4
HEART (Home Economics and Related Training)	284	7.8
EARTH (Environmental, Ag. Bus., Resources, Technologies & Horticulture)	45	1.2
None	1653	45.5
TOTAL	3642	100.0
30. Do you feel that the vocational program you are enrolled in will help prepare you for the specific occupation you want to follow for your life's work?		
yes	2397	66.8
no	1129	31.4
no response	64	1.8
TOTAL	3590	100.0
31. Do you currently hold a part-time job (for which you are paid)?		
no part-time job	1346	37.5
0-9 hours per week	372	10.4
10-19 hours per week	701	19.5
20-29 hours per week	641	17.9
30 or more hours per week	485	13.5
no response	45	1.3
TOTAL	3590	100.0

SECTION II

QUESTION	NO. OF STUDENTS	PERCENT OF TOTAL
1. Your sex?		
male	2010	56.0
female	1562	43.5
no response	18	.5
TOTAL	3590	100.0
2. Your age?		
15	7	.2
16	477	13.3
17	1695	47.2
18	1287	35.8
19	100	2.8
no response	24	.7
TOTAL	3590	100.0
3. Your class in high school?		
sophomore	38	1.1
junior	1559	43.4
senior	1968	54.8
no response	25	.7
TOTAL	3590	100.0

QUESTION	CODE	NO. OF STUDENTS	PERCENT OF TOTAL
4. What is your Mother's occupation?			
professional, technical & kindred	10	212	5.9
managers & administrators except farm	20	89	2.5
sales workers	25	111	3.1
clerical & kindred workers	30	461	12.8
craftsman & kindred workers	40	158	4.4
operatives, except transport	60	7	.2
laborers except farm	70	24	.7
farmers & farm managers	80	5	.1
farm laborers & farm foreman	82	1	.0
service workers except private household	90	427	11.9
occupation no reported	99	344	9.6
housewife	01	1751	48.8
TOTAL		3590	100.0

QUESTION	CODE	NO. OF STUDENTS	PERCENT OF TOTAL
5. What is your Father's occupation?			
professional, technical & kindred	10	196	5.5
managers & administrators except farm	20	432	12.0
sales workers	25	184	5.1
clerical & kindred workers	30	107	3.0
craftsman & kindred workers	40	691	19.2
operatives except transport	60	176	4.9
transport equipment operator	65	207	5.8
laborers except farm	70	77	2.1
farmers & farm managers	80	853	23.8
farm laborers & farm foreman	82	7	.2
service workers except private household	90	142	4.0
occupation not reported	99	507	14.1
housewife	01	1	.0
military	02	10	.3
TOTAL		3590	100.0

6. Name of vocational center enrolled in?

Please see Page 11.

7. Name of home high school?

Please see Page 11.

CENTER NAME	LOCATION	CENTER NUMBER	NO. OF STUDENTS	PERCENT OF TOTAL	MEMBER DISTRICT	DISTRICT NUMBER	NO. OF STUDENTS	PERCENT OF TOTAL
Agassiz Valley	Crookston	90	166	4.6	Climax	592	27	.8
					Crookston	593	90	2.5
					Fertile	599	49	1.4
Blue Mound	Luverne	43	214	6.0	Adrian	511	33	.9
					Hills-Beaver Creek	671	35	1.0
					Luverne	670	115	3.2
					Magnolia	699	28	.8
Central Minnesota	Litchfield	89	228	6.4	Eden Valley-Wat.	463	56	1.6
					Grove City	464	7	.2
					Howard Lake	880	33	.9
					Kimball	739	25	.7
					Litchfield	465	106	3.0
Clay County	Moorhead	65	226	6.3	Barnesville	146	28	.8
					Dilworth	147	29	.8
					Glyndon-Felton	145	10	.3
					Hawley	150	21	.6
					Moorhead	152	135	3.8
District 11	Anoka	11	180	5.0	Anoka	01	43	1.2
					Blaine	02	47	1.3
					Coon Rapids	03	89	2.5
East Central	Sandstone	50	99	2.8	Askov	566	31	.9
					Finlayson	570	18	.5
					Sandstone	576	47	1.3
Glacial Ridge	Willmar	51	155	4.3	Clara City	126	6	.2
					Kerkhoven-Sundberg	783	25	.7
					Murdock	782	12	.3
					New London-Spicer	345	40	1.1
					Raymond	346	9	.3
					Willmar	347	58	1.6

CENTER NAME	LOCATION	CENTER NUMBER	NO. OF STUDENTS	PERCENT OF TOTAL	MEMBER DISTRICT	DISTRICT NUMBER	NO. OF STUDENTS	PERCENT OF TOTAL
Interdistrict	St. Peter	56	177	4.9	Cleveland	391	16	.4
					LeCenter	392	56	1.6
					Nicollet	507	4	.1
					St. Peter	508	98	2.7
Lakes	Detroit Lakes	81	257	7.2	Audubon	021	5	.1
					Detroit Lakes	022	129	3.6
					Frazee	023	40	1.1
					Lake Park	024	21	.6
					Pelican Rapids	548	26	.7
					Perham	549	36	1.0
Mid State	Little Falls	79	311	8.7	Little Falls	482	168	4.7
					Pierz	484	94	2.6
					Royalton	485	27	.8
					Swanville	486		
					Upsala	487	18	.5
916	White Bear Lake	16	259	7.2	Centennial	012	3	.1
					Mahtomedi	832	11	.3
					Irondale-Moundsview	621	50	1.4
					N. St. Paul	622	36	1.0
					Roseville	623	36	1.0
					S. Washington County	833	7	.2
					Spring Lake Park	016	45	1.3
					Stillwater	834	38	1.1
					Mariner-White Bear Lake	624	25	.7

CENTER NAME	LOCATION	CENTER NUMBER	NO. OF STUDENTS	PERCENT OF TOTAL	MEMBER DISTRICT	DISTRICT NUMBER	NO. OF STUDENTS	PERCENT OF TOTAL
North Star	Roseau	77	222	6.2	Badger	676	20	.6
					Greenbush	678	44	1.2
					Roseau	682	130	3.6
					Warroad	690	23	.6
Northern Lites	Hallock	58	35	1.0	Hallock	351	2	.1
					Humboldt	352	2	.1
					Karlstad	353	5	.1
					Kennedy	354	3	.1
					Lancaster	356	16	.4
					Strandquist	444	6	.2
Prairie Lakes	Worthington	48	184	5.1	Brewster	513	28	.8
					Fulda	505	53	1.5
					Round Lake	516	15	.4
					Worthington	518	88	2.5
Redwood	Redwood Falls	73	236	6.6	Belview	631	29	.8
					Fairfax	649	30	.8
					Franklin	650	9	.3
					Morgan	636	50	1.4
					Morton	652	17	.5
					Redwood Falls	637	90	2.5
					Wabasso	640	10	.3
South Central	Blue Earth	69	214	6.0	Blue Earth	216	73	2.0
					Bricelyn	217	13	.4
					Delevan	218	34	.9
					East Chain	453	22	.6
					Elmore	219	21	.6
					Frost	220	8	.2
					Granada-Huntley	460	24	.7
					Winnebago	225	18	.5

CENTER NAME	LOCATION	CENTER NUMBER	NO. OF STUDENTS	PERCENT OF TOTAL	MEMBER DISTRICT	DISTRICT NUMBER	NO. OF STUDENTS	PERCENT OF TOTAL
Southern Polar	Barnum	55	62	1.7	Barnum	091	23	.6
					Moose Lake	097	27	.8
					Willow River	577	12	.3
Suburban Hennepin	Eden Prairie	87	259	7.2	Bloomington	271	97	2.7
					Eden Prairie	272	20	.6
					Edina	273	27	.8
					Hopkins	274	25	.7
					Minnetonka	276	28	.8
					Osseo	279	1	.0
					Richfield	280	53	1.5
West Central	Madison	53	106	3.0	Appleton	784	40	1.1
					Dawson	378	25	.7
					Madison	377	36	1.0
					Milan	128	4	.1
District undesignated							48	1.3
TOTAL			3590	100.0			3590	100.0

QUESTION	CODE	NO. OF STUDENTS	PERCENT OF TOTAL
8. What is the name of the vocational program in which you are currently enrolled?			
Agriculture & Natural Resources	01	131	3.6
Business & Office Occupations	02	334	9.3
Communication & Media	03	228	6.3
Construction	04	561	15.6
Consumer-Homemaking	05	18	.5
Health Occupations	08	495	13.8
Hospitality & Recreation	09	204	5.7
Manufacturing	10	28	.8
Marketing & Distribution	12	140	3.9
Personal Services	13	251	7.0
Public Services	14	117	3.3
Transportation	15	1071	29.8
no response		12	.3
TOTAL		3590	100.0

APPENDIX B

RESULTS OF INSTRUCTOR QUESTIONNAIRE

SECONDARY COOPERATIVE CENTER STUDY

PRELIMINARY RESULTS OF INSTRUCTOR QUESTIONNAIRE

STANLEY A. EDIN

SEPTEMBER 30, 1977

CENTER NAME	LOCATION	CODE	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
Agassiz Valley	Crookston	90	7	4.5
Blue Mound	Luverne	43	7	4.5
Central Minnesota	Litchfield	89	9	5.8
Clay County	Moorhead	65	6	3.9
District 11	Anoka	11	11	7.1
East Central	Sandstone	50	4	2.6
Glacial Ridge	Willmar	51	5	3.2
Interdistrict	St. Peter	56	5	3.2
Lakes	Detroit Lakes	81	10	6.5
Mid State	Little Falls	79	13	8.4
916	White Bear Lake	16	12	7.7
North Star	Roseau	77	14	9.0
Northern Lites	Hallock	58	5	3.2
Prairie Lakes	Worthington	48	7	4.5
Redwood	Redwood Falls	73	7	4.5
South Central	Blue Earth	69	9	5.8
Southern Polar	Barnum	55	5	3.2
Suburban Hennepin	Eden Prairie	87	12	7.7
West Central	Madison	53	6	3.9
no response			1	.6
TOTAL			155	100.0

PROGRAM YOU TEACH

CLUSTER TITLE	CODE	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
Agribusiness and Natural Resources	01	5	3.2
Business and Office Occupations	02	14	9.0
Communication and Media	03	10	6.4
Construction	04	24	15.5
Consumer-Homemaking	05	2	1.3
Health Occupations	08	21	13.5
Hospitality and Recreation	09	11	7.1
Manufacturing	10	1	.6
Marketing and Distribution	12	5	3.2
Personal Services	13	15	9.7
Public Services	14	5	3.2
Transportation	15	38	24.5
no reponse		4	2.6
TOTAL		155	100.0

GENERAL INFORMATION

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
1. Indicate your sex?		
male	102	65.8
female	51	32.9
no response	2	1.3
TOTAL	155	100.0
2. Indicate your age to your nearest birthday?		
under 25	7	4.5
26-30	50	32.3
31-35	25	16.1
36-40	16	10.3
41-45	22	14.2
46-50	19	12.3
51-55	8	5.2
56-60	4	2.6
over 60	2	1.3
no response	2	1.3
TOTAL	155	100.0
3. Indicate the vocational service area in which you are certified?		
Agriculture	9	5.8
Business & Office	12	7.7
Distributive Education	9	5.8
Health	22	14.2
Home Economics	22	14.2
Trade & Industrial	68	43.9
Technical	4	2.6
other	1	.6
no response	8	5.2
TOTAL	155	100.0

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
4. Indicate the type of certification you presently hold?		
1 year provisional/vocational	14	9.0
5 year secondary vocational	67	43.2
5 year post-secondary vocational	13	8.4
elementary/secondary other than life certificates	1	.6
other	20	12.9
no response	40	25.8
TOTAL	155	100.0

EXPERIENCE IN EDUCATION

1. Indicate the number of years you have held your present position?		
less than 1 year	18	11.6
1-2 years	26	16.8
3-4 years	56	36.1
5-6 years	29	18.7
more than 6 years	26	16.8
TOTAL	155	100.0
2. Indicate any secondary school teaching experience prior to being employed by the center?		
none	78	50.3
less than 1 year	10	6.5
1-3 years	34	21.9
4-6 years	9	5.8
7-9 years	8	5.2
more than 10 years	15	9.7
no response	1	.6
TOTAL	155	100.0

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
3. Indicate any post-secondary vocational teaching experience prior to being employed by the center?		
none	113	72.9
less than 1 year	11	7.1
1-3 years	17	11.0
4-6 years	8	5.2
7-9 years	2	1.3
more than 10 years	4	2.6
TOTAL	155	100.0

OCCUPATIONAL EXPERIENCE

1. How did you earn the majority of your occupational experience?		
full time job	105	67.7
part time job	28	18.1
summers only	11	7.1
through cooperative work program	2	1.3
no response	9	5.8
TOTAL	155	100.0
2. Indicate your total years of occupational experience applicable towards your current certification (convert part-time to full-time equivalency)?		
none	1	.6
less than 1 year	2	1.3
1-2 years	15	9.7
3-4 years	41	26.5
5-6 years	30	19.4
7-8 years	15	9.7
9-10 years	12	7.7
11-12 years	5	3.2
13-14 years	5	3.2
15-16 years	7	4.5
17-18 years	3	1.9
19-20 years	5	3.2
more than 20 years	13	8.4
no response	1	.6
TOTAL	155	100.0

PROFESSIONAL TEACHER EDUCATION

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
1. Indicate highest degree and/or diploma earned?		
high school/GED	27	17.4
Associate Degree (2 years)	7	4.5
Bachelor's Degree	90	58.1
Master's Degree	15	9.7
other	13	8.4
no response	3	1.9
TOTAL	155	100.0
2. Where did you receive the majority of your professional teacher education course work?		
did not receive any	1	.6
state college or university	125	80.6
private college	9	5.8
in-service	12	7.7
other	1	.6
no response	7	4.5
TOTAL	155	100.0
3. Indicate college or university professional teacher education in quarter hours?		
none	8	5.2
less than 12 quarter hours	9	5.8
13-24 quarter hours	28	18.1
25-36 quarter hours	21	13.5
37-45 quarter hours	18	11.6
more than 45 quarter hours	57	36.8
no response	14	9.0
TOTAL	155	100.0

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
4. Are you currently working on a degree?		
Master's Degree	36	23.2
Bachelor's Degree	21	13.5
other	6	3.9
none	83	53.5
no response	9	5.8
TOTAL	155	100.0

ADDITIONAL DATA

1. Do you sponsor/co-sponsor a co-curricular student organization?		
yes	99	63.9
no	53	34.2
no response	3	1.9
TOTAL	155	100.0
1A. If yes, which co-curricular student organization do you sponsor?		
VICA	33	21.3
DECA	11	7.1
FFA	7	4.5
OEA	12	7.7
FHA	1	.6
HEART	11	7.1
Local Health Occupations	2	1.2
other	24	15.5
no response	54	34.8
TOTAL	155	100.0

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
2. Which of the following professional organizations do you belong to?		
MVA (Minnesota Vocational Association)	73	N/A
MEA (Minnesota Education Association)	75	N/A
MFT (Minnesota Federation of Teachers)	26	N/A
AVA (American Vocational Association)	55	N/A
NEA (National Education Association)	54	N/A
AFT (American Federation of Teachers)	16	N/A
none of the above	17	N/A
TOTAL	316	
3. Not including the above, how many other professional organizations do you belong to?		
none	62	40.0
1-2	82	52.9
3-4	9	5.8
more than 4	1	.6
no response	1	.6
TOTAL	155	100.0
4. How many trade or business organizations do you belong to?		
none	113	72.9
1-2	38	24.5
3-4	2	1.3
no response	2	1.3
TOTAL	155	100.0

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
5. How many civic/community organizations do you belong to?		
none	53	34.2
1-2	90	58.1
3-4	7	4.5
more than 4	3	1.9
no response	2	1.3
TOTAL	155	100.0
6. In the current school year, how many visits to your program have been made by counselors of member schools?		
none	65	41.9
1-2	56	36.1
3-4	13	8.4
5-6	8	5.2
7 or more	8	5.2
no response	5	3.2
TOTAL	155	100.0
7. In the current school year, how many visits to your program have been made by administrators of member schools?		
none	50	32.3
1-2	52	33.5
3-4	20	12.9
5-6	11	7.1
7 or more	15	9.7
no response	7	4.5
TOTAL	155	100.0
8. Have specific, measurable goals and objectives been established for your training program?		
yes	141	91.0
no	13	8.4
no response	1	.6
TOTAL	155	100.0

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
9. Do you feel that specific goals and objectives are necessary to do an adequate job in teaching?		
yes	145	93.5
no	9	5.8
no response	1	.6
TOTAL	155	100.0
10. Which of the following descriptions would most closely describe your curriculum?		
My course is divided into a specific number of units and students are expected to progress as a group from one unit to another. Generally, tests are given to the whole class at the same time.	86	55.5
The content of the course is divided into certain specified competencies and students are generally allowed to progress at their own pace. Generally, students may take different tests at different times.	65	41.9
no response	4	2.6
TOTAL	155	100.0

OPINIONS

1. Do you feel that guidance counselors in member schools are doing an adequate job in counseling students about vocational technical educational opportunities?		
yes	31	20.0
no	120	77.4
no response	4	2.6
TOTAL	155	100.0

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
2. Do you as an instructor feel that you have any responsibility in counseling students about further vocational technical educational opportunities?		
yes	154	99.4
no	1	.6
TOTAL	155	100.0
3. Do you feel that it is a part of your responsibility to help graduating students find jobs upon completion of your program?		
yes	65	41.9
no	85	54.8
no response	5	3.2
TOTAL	155	100.0
4. Do you have an advisory committee for your program?		
yes	145	93.5
no	7	4.5
no response	3	1.9
TOTAL	155	100.0
4A. If yes, how many times a year does your advisory committee meet?		
none	2	1.3
one	27	17.4
two	88	56.8
more than three	30	19.4
no response	8	5.2
TOTAL	155	100.0

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
4B. If yes, how would you rate the effectiveness/usefulness of your advisory committee?		
very helpful	66	42.6
somewhat helpful	66	42.6
not too helpful	11	7.1
no response	12	7.7
TOTAL	155	100.0
5. How would you rate the facilities available for your training program?		
more than adequate	39	25.2
adequate	93	60.0
inadequate	22	14.2
no response	1	.6
TOTAL	155	100.0
6. How would you rate the equipment available for your training program?		
more than adequate	43	27.7
adequate	102	65.8
inadequate	9	5.8
no response	1	.6
TOTAL	155	100.0
7. How would you rate the supplies available for your training program?		
more than adequate	43	27.7
adequate	104	67.1
inadequate	8	5.2
TOTAL	155	100.0

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
8. Which one of the following goals do you feel would be of primary importance in your program?		
occupational exploration	94	60.6
preparation for advanced training	39	25.2
placement in a job	12	7.7
no response	10	6.5
TOTAL	155	100.0
9. Which of the folllowing goals do you feel would be of second greatest importance in your program?		
occupational exploration	30	19.4
preparation for advanced training	85	54.8
placement in a job	31	20.0
no response	9	5.8
TOTAL	155	100.0
10. Do you believe that vocational center curriculums should be articulated with post-secondary AVTI curriculums in the same occupational area?		
yes	133	85.8
no	20	12.9
no response	2	1.3
TOTAL	155	100.0
10A. If yes, do you believe it is a part of your responsibility to work toward program articulation?		
yes	123	79.4
no	6	3.9
no response	26	16.8
TOTAL	155	100.0

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
10B. If yes, have you made any effort to articulate your curriculum with any AVTI curriculums in the same occupational area?		
yes	85	54.8
no	41	26.5
no response	29	18.7
TOTAL	155	100.0
11. Which of the following do you feel should have the primary responsibility to initiate curriculum articulation efforts?		
vocational centers	14	9.0
AVTI's	50	32.3
State Department	79	51.0
no response	12	7.7
TOTAL	155	100.0
12. Which of the following would you rate as your most significant problem as you work with students in your program?		
discipline	12	7.7
motivation	51	32.9
attendance	30	19.4
student ability	27	17.4
none of the above	31	20.0
no response	4	2.6
TOTAL	155	100.0
13. Which of the following would you rate as your second most significant problem as you work with students in your program?		
discipline	22	14.2
motivation	46	29.7
attendance	26	16.8
student ability	21	13.5
none of the above	38	24.5
no response	2	1.3
TOTAL	155	100.0

QUESTION	TOTAL OF INSTRUCTORS	PERCENT OF TOTAL
14. Do you feel that your program is a "dumping ground" for low achievers and problem students?		
yes	42	27.1
no	103	66.5
no response	10	6.5
TOTAL	155	100.0